GOOD ROADS MAKING AN ECONOMIC FACTOR

It Is One of Highest Importance to Man of Moderate Means.

COST OF LIVING REDUCED

John N. Willys Shows Wherein Much Depends on Highway Building.

By JOHN N. WILLYS.

good roads is the one most important factor which must consider in the next The improved highway is the of salvation for the poor man, ese days of high cost of living, ook to the cheaper transportaodstuffs as our way out. We nger expect to better our conrough a greater supply of necessities, for every effort we have made toing the cost of foodstuffs herehas been met with the response the United States is now about as deciy cultivated as it can be. In our public are no longer turnother words, our public are no longer turn-ing to the country in an effort to produce a larger amount of food. Therefore we must face the problem of getting along with the same amount that is now pro-

The only solution left for us is to cut our cost of production and delivery. The best way to accomplish this is to provide good roads, for we have already had many demonstrations of how good roads will work to our advantage.

The improvement of highways in many

The improvement of highways in many parts of our country in the last few years has been invariably followed by better living conditions. Where the roads leading into a large city have been improved, we have seen an increased supply of foodstuffs on the local markets and a larger number of farmers bringing their products into the city. This of a necessity results for city. This of a necessity results in lower prices for the products and a long step toward better living conditions.

On the other hand, the improvement of roads throughout the country is invariably featured, by an incommendation.

followed by an improvement in farming methods. The agriculturist who hereto-fore devoted his energies to grazing and the production of rough foodstuffs, such corn, is now turning to what is known market gardening. He is raising po-nes, beans, peas and other commodities that are in every day demand, simply be cause he can get them to market where heretofore markets were denied him. It is no uncommon sight now to see farmers driving eighteen or twenty miles to market with loads of produce, which, before the highways were improved, were denied the consumer. The automobile it is true. the enignways were improved, were denied the consumer. The automobile, it is true, has had a great deal to do with increasing this supply, but even this vehicle would be helpless without highways on which to

old world have always regarded us a crimltivated than ten acres farmed in the old

Villa Uses Hudsons in His War Work

GEN. FRANCISCO VILLA, leader of the Mexican Constitutionalists, is using three Hudson six cylinder cars in his field operations. The cars were purchased from the Hudson dealer at El Paso, Tex. With these machines Villa has kept in close personal touch with his campaign. During the attack and capture of Torreon he travelled back and forth in his Hudson six between Gomez Palacio, Bermejillo and other points. Frequently these trips were made by the General during the night in order to economize time and insure more rapid travel.

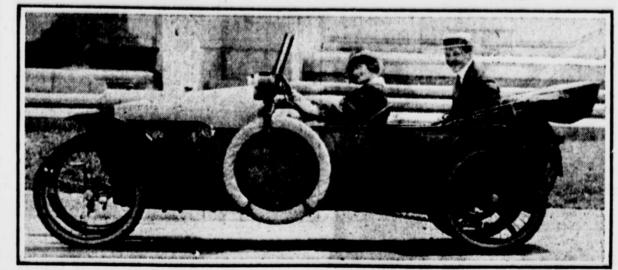
AUTOMOBILE SECURITIES.

Afax-Grieb Rubber Co com	
Ajax-Grieb Rubber Co pf 90	-
Aluminum Castings pf	100
Chaimers Motor Co com 90	95
Chalmers Motor Co pt 9016	9214
Pirestone Tire and Rubber Co com, 287	292
Firestone Tire and Rubber Co pf 106	109
Garford Co of	85
General Motors Co com 8114	5214
General Motors Co pf 90	92
B F Goodrich Co com 26	2634
B F Goodrich Co pf 8934	90
Goodyear Tire and Rubber Co com 172	176
Goodyear Tire and Rubber Co pf as	100
Gray & Davis Co pf 95	10216
International Motor Co com	8
International Motor Co pf 3	10
Relly-Springfield Tire Co com 48	52
Kelly-Springfield Tire Co pf	110
Lozler Motor Co com	30
Lozier Motor Co pf	45
Maxwell Motor Co com 10%	10%
Maxwell Motor Co 1st pf	43
Maxwell Motor Co 2d pf 1714	1754
Miller Rubber Co	135
Packard Motor Co com	
Packard Motor Co of 91	98
Peerless Motor Co com	25
Peerless Motor Co pf	70
Pope Manufacturing Co com	114
Pope Manufacturing Co pf	8
Portage Rubber Co com	30
Portage Rubber Co pf	85
Res Motor Truck Co 8%	914
Reo Motor Car Co	30
Rubber Goods Manufacturing Co pt 100	110
Stewart-Warner Speedometer Co com. 48	50
Stewart-Warner Speedometer Co pf 90	100
Studebaker Co com 32%	3315
Studebaker Co pf 8814	8915
Swinehart Tire Co 60	65
U S Rubber Co com 5736	5814
U S Rubber Co pf	103
White Co pf. 107 Willys-Overland Co com. 64	110
Willys-Overland Co off	66
mmy = 0. eriand co pr 88	93
AMATRING MUD BACK TOT	
AVOIDING THE TOOL BOX	

Stearns Car Has Hidden Compartments to Hold Implements.

From the early days of the automobile industry, when changes in design came so fast that a new model bore very little resemblance to its predecessor of the year The advent of good roads, too, has before, down to the past year or so, there have been one or two details of design that tensive farming. The countries of the were never satisfactorily disposed of. One asteful people, in that the prod-ed on 100 acres of land in this was often less than they produced of the motor car was carried on the runof the motor car was carried on the run-ning board—accessibility was important condition. The American farmer finds that he will get a greater re-from one acre of land intensively aided than ten acres farmed in the old methods would be retofore pro-This intensive farming is the di-

Scripps-Booth Cyclecar Handled Here



Claims of great economy are made for the Scripps-Booth cyclecar, which is handled here by the Willis Co. at 85 Chambers street. Half a cent a mile to operate is what H. A. Shomo, sales mana-

SOUTH-CENTRAL NEW JERSEY MARKET FOR MOTOR TRIP OF GOOD ROADS AND VARIED SCENERY

A trip outlined by the Bureau of Tours of the Automobile Club of America embraces an easy day's run over good roads in south-central New Jersey, where nature in her new spring garb presents attractive scenes to the motorist. Leaving New York by way of the Staten Island ferry for St. George, the run is made over excellent roads through Grant City, New

run over a good State road through Dun-ellen to Plainfield. On leaving Plainfield, instead of using the old roads through Scotch Plains to Springfield, take excellent State roads which will now be four State roads which will now be found run-ning through Fanwood and Westfield to Springfield. Here another short cut will be found, known as the Seven Bridges road, which is in fine condition



Map of New Jersey Tour.

a connection with Springfield avenue for Newark. This latter is in good condition and runs through Irvington; from which point Clinton avenue is followed.

In order to avoid the heavy traffic in the central part of Newark do not take the usual turn into Washington street but keep straight on and then bear left into Broad street to the railroad station, where turn right into Fair street and continue east, becoming Lafayette street

Taxteab Companies From Stock holm to San Francisco Like Them It is a far cry from Stockholm, Sweden to San Francisco, Cal., not so far, how

are the principal taxicab operators. This company, after thorough and exhaustive tests with various makes of tires, adopted the United States "Nobby Tread" and in 1913 purchased many thousands of dollars worth of tires from the United States Tire

largest in the city, has arrived at the same conclusion in respect to the tire equipment with which their taxis should

Why Tires Go Wrong; Not a "Slave" Film THE Goodyear company has is-

sued a series of what are known as "Tire Conservation Service Bulletins," to enable tire users, by proper care, to obtain more mileage from their tires. In the series are such titles as "Why Tires Sometimes Go Wrong," "Under-inflation--Its Consequences," "The Story of a Neglected Cut," &c. These suggestions are offered:

1. Don't drive with under-inflated

2. Don't neglect the little cuts in your tread.

3. Don't encounter severe jolts.

4. Don't delay tire repairs. 5. Don't ruin your tubes.

6. Don't start or stop suddenly, 7. Don't drive with wheels out of

alignment 8. Don't fail to use French tale in

9. Don't run in ruts, or scrape against the curb

10. Don't drive in car tracks.

TRUCKS IS BOOMING

Large Investments in Motor

Equipment by Many

Big Concerns.

REPORT BY WHITE CO.

Sales Show Cumulative Result

of Service Given by Trucks

in Last Four Years.

in new equipment, and their purchases

Active buying is shown by municipali-

o eleven contractors, coal companies and

material dealers, as announced a few

purchase power dump trucks.

supply dealers.

are the cumulative result of the service given by these trucks during the past four

11. Don't use chains-use All-Weather Tread Tires. 12. Don't allow your tires to en-

counter sharp obstructions 13. Don't allow grease, oil or acid to touch your tires.

14. Don't allow clincher rims to become bent or rusty.

15. Don't let rust collect on the 16. Don't carry spare tubes unpro-

17. Don't fail to keep your spare tires in a cover

three-quarter ton truck to the city of Woonsocket, R. I.; two pelice patrols to St. Paul, Minn., one to Syracuse and one to the city of Panama; two ambulances to Bellevue and Allie! Hospitals, New Heavy and systematic buying of motor trucks by big concerns is reported by the White Company of Cleveland. Many of York, making a total of three; two three quarter ton trucks to the Government of Panama; one three-quarter ton truck to the United States Government for the Alaska Board of Road Commissioners. making a total of two. One three-quarter ton truck to the

Pabst Brewing Company, Cleveland, making a total of four; one one and a half ton truck to P. Schoenhofen Brewing Company, Cleveland, making a total of six; one one and a half ton truck to Pilsener Brewing Company. Cleveland, making a total of two; two five ton trucks to Congray Seing Brewing Company. to Conrad Seipp Brewing Company, Chi-cago; one three ton truck to South Bend weeks ago, the company reports the sale of fifteen power dump trucks to county commissioners, contractors and building Brewing Association, and one three ton Brewing Association, and one three ton truck to Kuntz Brewing Company, Ltd., Toronto, making a total of three. Five other brewing companies, the Berghoff, Garden City. Forest City, Davenport and In the list of current purchasers are eight municipalities and counties that

SEEK TO ELIMINATE **HEADLIGHT DAZZLE**

Obscuring a Segment of Each Lens Appears to Be Best Pian.

NO REDUCED CANDLEPOWER

Because High Intensity of Rays Is Needed by Road Users.

By MITCHELL MAY, Secretary of Sinte.

An investigation into the question of motor car headlights was undertaken a short time ago by the Royal Physical Laboratory in London at the request of the local government board, which is understood to contemplate the framing of a regulation. Some of the results obtained have recently been published and are now available.

The elimination of development

tained have recently been published and are now available.

The elimination of dazzle being evidently possible by means of a sufficient reduction in the intensity of the light by which it is caused tests were made to discover the order of the intensity of lights which, first, will dazzle at night and, secondly, may be regarded as sufficient for safe driving. It is known that sources of light at eye level of considerably less than Ioo candle-power are sufficient to dazzle the pedestrian or the driver of another vehicle and prevent him from seeing beyond the dazzling light unless he has strong headlights himself, and therefore for the satisfactory elimination of the dazzle no direct or spectular reflected light from any source must meet the eye of an observer.

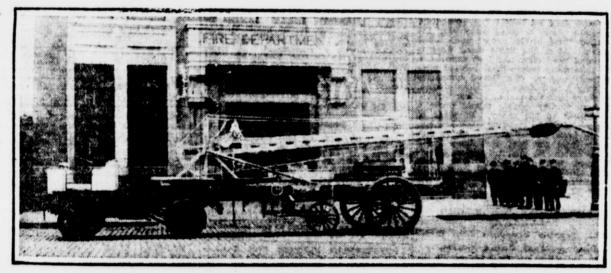
On the other hand, if a dark object is to be seen 100 feet ahead of an observer against a dark background the illumination must be of an order produced by the light of 1,000 candle-power. As 100 feet does not seem an excessive figure for distance at which objects should be visible to a car driver it appears that no restriction of the intensity of car lights would be effective in appreciably reducing the dazzle and at the same time leave adequate lights for driving.

An attempt was then made to construct a head lamp in such a way that virtually all the light was eliminated from that

An attempt was then made to construct a head lamp in such a way that virtually all the light was eliminated from that portion of the beam which could meet the eye of an observer approching it. This attempt was based upon the view that the portion of a headlight beam most required by a driver is above the road and also filuminates the hedges and signs upon his left hand side. On the other hand, the portion of the beam which chiefly dazzles any one coming upon his proper side of the road toward the car is that emitted above the horizontal and to the right hand side of the car driver. If, therefore, this latter portion of the beam could be cut out without seriously affecting the brightness of the remainder oncoming traffic on a straight road would not be dazzled, while the driver would still be enjoying light to the full height on his left hand side and also below the horizontal for the whole width of the road.

eight municipalities and counties that bought power dump trucks for road work, five that bought fire apparatus, three that bought patrols, one that bought seven trucks four department stores that bought five, nine four teen, four groceries that bought five, nine meat packer that bought five, nine miscellaneous buyers who bought ten trucks of various types and seven taxicab companies that bought fifty-three trucks of various types and seven taxicabs. The number of commercial vehicles thus sold is 128 and the total now making a total of eighteen: ten one and in the first would not be dazzled, while the driver would not be proposed.

Tractors Replace Horses on Water Towers



The R. & L. Co. has delivered to the New York Fire Department two Garford four wheel tractors designed for use with the Standard water towers formerly drawn by horses. The tractors easily passed all tests for speed and climbing qualities.

box, two compartments are provided, one promote increased industrial activity, and therefore better the living conditions of thousands of our city dwellers, but they provide an improved social life for people who live in the country. The family which has access to a good road and therefore quicker and more pleasant trips, goes to chusch of taxes, which are the country of the running board apron, opening out over the running board. There is no arrival to the country of the running board apron, opening out over the running board. There is no arrival to the country of the running board apron, opening out over the running board. There is no arrival to the country of the country of the country of the running board apron, opening out over t oftener, visits the neighbors oft- bitrary arrangement of the tools in the and attends farmer club meetings e are important factors in the

MODERN TOURING COMFORTS.

Travel by Automobile an Easier Thing Than It Used to Be.

of the up to date motor car in hort time. Keen competition has effectively the control of the up to date motor car in hort time. Keen competition working condition is. ndreds of manufacturers is re-

hop out in the mud in order to light the old fashioned oil lamps, and it was not to see the driver spending most there is nothing of a serious ers. gave a safety lecture talk.

The meetings extended over several days and brought out practically every thanks to the greatly improved of building by the tire com-Five thousand miles is a pretty range for a set."

Silver points

markable fact about all this improvement to that all these conveniences are found on the copular priced car which were not expected on high priced carations a year special interest in this work to every corner of the big plant.

d roads are an undisguised blessing. accessibility-some even stick to it yet. and this every one who has given the matter any thought will admit. They not only box, two compartments are provided, one

"SAFETY FIRST" IN PLANT.

compartments.

Workers Meet Goodrich Factory Manager to Discuss It.

A series of industrial meetings took place at the rubber factories of the Good

rich company in Akron recently.

To the slogan of "Safety First," almost a thousand foremen, inspectors, managers and superintendents gathered to hear taiks the comfort and convenience of automobile. No other vehicle increasing efficiency throughout the huge rubber plant, and hear their works managers and superintendents gathered to hear taiks on safety, discuss ways and means of increasing efficiency throughout the huge rubber plant, and hear their works managers.

for this, coupled with the ever c demand for convenient apon the easy manipulation of the many manipulation of the case m ject of the campaign is to make "Safety First" as much a part of the manufacture of its tires and other rubber goods as it

aiready is a part of the tires' design and construction.

Moving pictures which illustrated, in issure time underneath. Nothing sometruction.

sometruction.

Moving pictures which illustrated, in true "movie" romance form, some things that make for safety in big plants, were tor going and a turn of a switch the car. And as for mechanuble there is nothing of a serious uble there is nothing of a serious ers, gave a safety lecture talk.

Five thousand miles is a pretty shown marked the idea as successful.

The Goodrich company maintains an Silver points out, the most re-elaborate department of safety and hy-

rect result of good roads, for where the conspicuous a position—it marred the effect of the clean body lines. The importance of the clean body lines of the clean body lines. The importance of the clean body lines of the clean body lines. The importance of the clean body lines of the clean body lines of the clean body lines. The importance of the clean body lines of the clean body lines of the clean body lines of the clean body lines. The importance of the clean body lines o were profitable, now finds that he can der the seats and tucked the tools away is take a small load to the consumer as in that, although a few stuck to the old running board location on account of its Good roads are an undisguised blessing.

Good roads are an undisguised blessing. of one to Windsor, then right to Edinburg. Again Treads.

Penn's Neck. Here at the crossroads turn left and run through Monmouth Junction and Deans to New Brunswick. This road is in good condition. New Brunswick and cross the on leaving New Brunswick and cross the bridge over the Raritan River. At once turn left along the river and a beautiful road with very pleasing scenes will be found on the run of seven and one-half miles to Bound Brook.

When in need of anything in the way of cars, they are bought on a basis of merit first, the price consideration of abasis of merit first, the price consideration of they are supplied, they are bought on a basis of merit first, the price consideration of they are supplied, they are bought on a basis of merit first, the price consideration of they are supplied, they are bought on a basis of merit first, the price consideration of two: one each to Ramsey county. Mills ord county, North Carolina, power dump trucks with tractor wheels to Chatham county. North carolina: power dump trucks with tractor wheels to Chatham county. North carolina: power dump trucks with tractor wheels to Chatham county. North carolina: power dump trucks with tractor wheels to Chatham county. North carolina: power dump trucks with tractor wheels to Chatham county. North carolina: power dump trucks with tractor wheels to Chatham county. North carolina: power dump trucks with tractor wheels to Chatham county. North carolina: power dump trucks with tractor wheels to Chatham county. North carolina: power dump trucks with tractor wheels to Chatham county. North carolina: power dump trucks with tractor wheels to Chatham county. North carolina: power dump trucks with tractor wheels to Chatham county. North carolina: power dump trucks with tractor wheels to Chatham county. North carolina: power dump trucks with tractor wheels to Chatham county. North carolina: power dump trucks with tractor wheels to Chatham county. North carolina: power dump tru

tinue east, becoming Lafayette street later on. Go under the railroad, then turn left into Poik street one block and turn right into Perry street, which is followed right into Ferry street, which is followed to the Essex-Hudson Lincoln Highway, formerly called the Newark Plank Road. This road is in good condition and connects with the Hudson County Boulevard for the return to New York nects with the Hudson Coun-for the return to New York.

PREFER "NOBBY TREAD" TIRES.

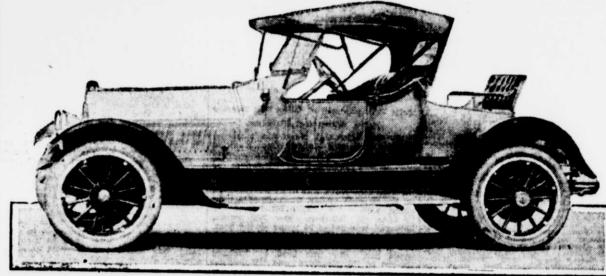
ever, but that both cities have found a

common ground on which they have arrived at the same decision respecting a very important part of their city trans portation problems. In the Swedish capital Backdahl & Co.

Company.
In San Francisco, another company, the

Mitchell Car Pleases Woman Driver

Cole Speedster for French Car Importer



This is a Cole speedster which the Colt-Stratton Co. has just delivered to Andre Massenat, former importer of the Panhard car. It is one of two Coles he has, and is known as a Sporting Speedster.

Freehold. At the station, go out Manalaban and Mariboro to company has a contract to use only miss a contract to use only miss an avenue and follow this road straight on through militure; to Manalapan. One service uses "Nobby Treads" on all its machines. In New York city the Yellow Taxicab ompany to the main road to Hightstown. Turn left to Windsor, then right to Edinburg. Again to the main road to Hightstown. Turn left to Windsor, then right to Edinburg. Again to the main road to Hightstown Turn left to Windsor, then right to Edinburg. Again to the main road to Hightstown Turn left to Windsor, then right to Edinburg. Again to the main road to Hightstown Turn left to Windsor, then right to Edinburg. Again to the main road to Hightstown and penn's Neck to Frinceton and Penn's Neck to Frinceton and Penn's Neck to Frinceton when it buys cars or equipment, is influenced primarily by two factors," "Care when it buys cars or equipment, is influenced primarily by two factors," "contractors to the Capt. Cook making a total of two; one to the city of Checkeland, stream of the Penn's Neck to Frinceton and Penn'

making a total of two; two three ton, two one and one-half ton and one three-quarter ton truck to Armour & Co., making a total of sixty-three; one five ton underslung truck to Pennsylvania Railiroad. Altoona, Pa., to be mounted with a steam fire engine; one five ton truck to American Can Company, Chicago, making a total of seven; one three ton truck to Central Union Telephone Company, Indianapolis, making a total of three; one three ton truck to McPike Drug Company, Kansas City, making a total of three; one three ton truck to National Plumbing and Heating Supply Company, Chicago, making a total of three; one three ton truck to National Plumbing and Heating Supply Company, Chicago, making a total of three and one three-quarter ton truck to East Ohio Gas Company, Cheveland.

Taxicab purchases of considerable size were made by New York and Washington operating companies. Within less than a month after placing an order for ten White touring cars for rental work at the make an error in putting new cars in important long distance events in purforant long distance events in profess.

and the University Motor Livery Company Knox Automobile Company to of Chicago ordered three.

were made by New York and Washington operating companies. Within less than a month after placing an order for ten White touring cars for rental work at the national capital the Terminal Taxicab Company has made another increase of twenty-five White taxicabs. This purchase gives the company a total of sixty cabs, lifteen touring cars and one truck, all built by the White Company.

The New York purchaser was the Taxicab Association, Inc., which began business and a desire to enlarge the field of service resulted in an order for fourteen additional taxicabs.

Sales of taxicabs are being made in all

of Chleago ordered three.

Among other sales reported by the White Company was an order for two taxicabs from Lord & Taylor, the New York department store. The cabs were purchased for the use of store patrons and it is believed that this is the first instance of a big retail establishment installing a cab service exclusively for customers.

Knox Automobile Company to E. O. Sutton of Springfield, Mass., has been confirmed by the court. This has placed it in the hands of persons who will take up the active promotion of the company's business and extend it on a much wider ever enjoyed before. It is Mr. Sutton's intention to continue the active manufacture of pleasure cars, tractors and fire apparatus.

and the same of th

Here is a Mitchell four cylinder car which was sold by Dronet & Page, the local dealers, to Dorothy Dix. She will drive it herself.